STATUS OF THE CLAIMS

1-32. (canceled)

33. (currently amended) A method of decolonizing bacterial populations comprising topically applying to a patient in need thereof [[at]] to a bacterially infected site a topical composition comprising lysostaphin and one or more lantibiotics.

34. (previously presented) The method of claim 33, wherein said topical composition comprises from about 0.10 to about 10.0 wt % of lysostaphin.

35. (previously presented) The method of claim 33, wherein said topical composition comprises from about 0.10 to about 10.0 wt % of one or more lantibiotics selected from the group consisting of nisin, subtilin, epidermin, gallidermin, cinnamycin, duramycin, ancovenin, and Pep 5.

36. (currently amended) The method of claim 35, wherein said topical composition comprises nisin and [[a]] an agent selected from the group consisting of a surfactant, [[or]] a chelating agent [[or]] and carvacrol.

37. (previously presented) The method of claim 36, wherein said chelating agent comprises ethylenediaminetetraacetic acid (EDTA).

38. (previously presented) The method of claim 35, wherein said topical composition comprises a recombinant nisin variant, wherein said variant is selected from the group consisting of nisin variant H27K and nisin variant H31K.

39. (previously presented) The method of claim 33, wherein said topical composition comprises a pharmaceutically acceptable carrier for topical application.

40. (previously presented) The method of claim 33, wherein said topical composition further comprises at least one anti-infective active agent other than lysostaphin or a lantibiotic selected from the group consisting of beta-lactams, polymixin, glycopeptides, mutanolysin, lysozyme, cellozyl muramidase, antibacterial antibodies and antibacterial peptides.

41. (previously presented) The method of claim 33, wherein said topical composition further comprises a member selected from the group consisting of bacitracin and neomycin.

42. (previously presented) The method of claim 39, wherein said pharmaceutically acceptable carrier for topical application is in the form of a spray, mist, aerosol, lotion, cream, aqueous or non-aqueous solution or liquid, oil, gel, ointment, paste, unguent, emulsion or suspension.

43. (previously presented) The method of claim 42, wherein said pharmaceutically acceptable carrier for topical application is an oil-in-water emulsion-based cream or lotion comprising an aqueous phase, an oil phase, and an emulsifier.

44. (previously presented) The method of claim 43, wherein said aqueous phase comprises a skin absorption promoter selected from the group consisting of DMSO and glycerides of fatty acids.

45. (previously presented) The method of claim 33, wherein said topical composition is selected from the group consisting of a cream formulation comprising: about 0.10 to about 10% by weight of lysostaphin, about 0.10 to about 10% by weight one or more lantibiotics; about 2 to about 10% by weight of a composition comprising glycerin ester of natural vegetable fatty acids, isostearic acid and adipic acid; about 0.25 to about 3% by weight of a composition comprising PEG-6 caprylic/capric glycerides; about 2 to about 8% by weight of a composition comprising about 40% polyacrylamide, about 15% C_{13}-C_{14} Iso-paraffin, about 5% Laureth-7 and sterile water, a composition comprising

acrylamide/sodium acryloyldimethyl taurate seppic copolymer, isohexadecane and polysorbate 80; 0 to about 10% by weight of a composition comprising glyceryl caprylate and/or a composition comprising caprylic/capric glycerides; and about 70 to about 90% by weight of water.

46. (previously presented) The method of claim 33, wherein said topical composition is coated on the surface of a topical applicator.

47-54. (canceled)

55. (previously presented) The method of claim 33, wherein said bacterially infected site is selected from the group consisting of infected abrasions, infected skin cuts, infected surface cuts, infected burns, infected surgical incisions, and infected decubiti.

56. (previously presented) The method of claim 33, wherein the concentration of lysostaphin in said composition is lower than the minimum inhibitory concentration of lysostaphin when used independently.

57. (previously presented) The method of claim 33, wherein the concentration of said lantibiotic in said composition is lower than the minimum inhibitory concentration of said lantibiotic when used independently.

58. (previously presented) The method of claim 57, wherein said lantibiotic is nisin.

59. (previously presented) The method of claim 33, wherein the concentrations of lysostaphin and said lantibiotic present in said composition are lower than the minimum inhibitory concentrations of either lysostaphin or said lantibiotic when used independently.

60. (previously presented) The method of claim 33, wherein said method decolonizes bacterial populations residing below the dermal layer.

61. (previously presented) The method of claim 43, wherein said emulsifier is a water-soluble polymer in an oil phase.

62. (previously presented) The method of claim 43, wherein said emulsifier is an inverse emulsion of polyacrylamide in liquid paraffin.

63. (previously presented) The method of claim 43, wherein said oil phase comprises a fatty acid triglyceride blend that is solid at room temperature.

64. (previously presented) The method of claim 33, wherein said bacterial populations comprise skin pathogens.

65. (previously presented) The method of claim 33, wherein said bacterial populations comprise *Staphylococcus aureus*.

66. (previously presented) The method of claim 33, wherein said bacterial populations comprise *Pseudomonas aeruginosa*.

67. (previously presented) The method of claim 33, wherein said topical composition comprises 0.1 % by weight lysostaphin and 0.1 % by weight nisin.

68. (previously presented) The method of claim 33, wherein said composition is applied to said infected site of said patient once a day.

69 (previously presented) The method of claim 33, wherein said composition is applied to said infected site of said patient two or more times a day.

70. (previously presented) The method of claim 33, wherein said composition is applied to said infected site in one or more applications on a single day.

71. (previously presented) The method of claim 33, wherein said composition is applied to said infected site on multiple days.

72. (previously presented) The method of claim 33, wherein said method of decolonizing eradicates said bacterial populations at said infected sites.

73. (previously presented) The method of claim 33, wherein said method of decolonizing reduces the number of bacterial colonies that can be grown from said infected site after application of said composition compared to the number of colonies that can be grown from said infected site prior to said application.

74. (previously presented) The method of claim 33, wherein said method of decolonizing reduces by 30% to 100% the number of bacterial colonies that can be grown from said infected site after application of said composition compared to the number of colonies that can be grown from said infected site prior to said application.

75. (previously presented) The method of claim 33, wherein said method blocks bacterial colonization at said infected site.